Object Oriented Programming (BDS-2B, BDS-2D) – Homework 2

Important Instructions:
- Submit compressed files (.zip or .rar etc.) that contain only .cpp files of each question. Name of each .cpp file should be the question no as in homework document.
- Name of your main submission file should be your roll number.

Exercise 1

Write a C++ program that declares a char pointer and dynamically allocate memory for it. Your program should also input a c-string and display the contents backward by using dereference operator. For instance, if the string argument is "Gravity" the program should display "ytivarG".

Exercise 2

Write a C++ program that inputs an integer array from user. You should pass this array to a function int max_and_minAverage(int[], int) that receives address of the array and its size and finds the max and min. This functions displays max and min and returns the average of max and min back to the main function. The main function should display that average.

Exercise 3

Write a C++ function that accepts an int array and the array's size as arguments. The function should create a new array that is twice the size of the argument array. The function should copy the contents of the argument array to the new array, and initialize the unused elements of the second array with 0. The function should return a pointer to the new array.